

What is claimed is:

1. A system that provides a path for a linear motor, comprising:
a first path portion having a plurality of armature windings;
at least two branch path portions spaced in a direction of travel from the first path portion, each of the at least two branch path portions including a plurality of armature windings; and
a routing system between the first path portion and the at least two branch path portions, the routing system being operative to effect movement of a stage between the first path portion and a selected branch path portion of the at least two branch path portions.
2. The path of claim 1, wherein the routing system is configured to selectively couple the first path portion with the selected branch path portion.
3. The path of claim 2, further comprising a bridge moveable between first and second positions, such that when the bridge is in the first position, the routing system couples the first path portion with one of the at least two branch path portions and when the bridge is in the second position, the routing system couples the first path portion with another of the at least two branch path portions.
4. The path of claim 3, wherein the bridge further comprises at least one bridge path portion moveable with the bridge and configured to couple the first path portion with the selected branch path portion based on the position of the bridge.
5. The path of claim 4, wherein the bridge is moveable along a direction substantially transverse to a direction of travel along the first path portion.
6. The path of claim 5, further comprising a linear motor system operative to selectively move at least part of the bridge relative to the first path portion so that a

corresponding bridge path portion couples the first path portion with the selected branch path portion.

7. The path of claim 4, wherein the bridge is rotatable about an axis between at least first and second conditions, the first path portion being coupled to a corresponding one of the at least two branch path portions according to the condition of the bridge.

8. The path of claim 3, further comprising a motor control system, the motor control system being operative to select the selected path portion and control the bridge to effect movement of the stage between the first path portion and the selected path portion based on at least position of the stage moving along the path.

9. The path of claim 2, wherein the routing system further comprises a set of armature windings associated with each respective branch path portion, energization of a selected set of the armature windings of the routing system is operative to effect movement of the stage between the first path portion and the selected branch portion.

10. The path of claim 1, wherein at least one of the at least two branch path portions is at a different level relative to the first path portion.

11. A path for a linear motor system, comprising:
first path means having field means for providing an electric field relative to a first direction of travel;
second path means having field means for providing an electric field relative to a second direction of travel;
third path means having field means for providing an electric field relative to a third direction of travel; and
means for routing a stage, which is moveable along the path, between the first path means and a selected one of the second and third path means.

12. The path of claim 11, wherein the means for routing further comprises field means for providing an electric field for urging the stage in a desired direction between the first path and the selected one of the second and third path means.

13. The path of claim 12, further comprising means for moving a bridge path means to interconnect the first path means with the selected one of the second and third path means.

14. A method to facilitate movement of at least one stage along a path in a linear motor system that includes a juncture having at least two branch path portions and a trunk path portion, the method comprising:

- detecting the position of the at least one stage relative to the path;
- selecting a route for the at least one stage through the juncture; and
- operatively associating the trunk path portion with one of the at least two branch path portions according to the selected route to enable movement of the at least one stage along the selected route.

15. The method of claim 14, further comprising controlling armature windings of the path to effect movement of the stage along the selected route in a desired direction between the trunk path portion and the one of the at least two branch path portions.

16. The method of claim 15 further comprising moving at least part of a bridge having a bridge path to position the bridge path to interconnect the trunk path portion and the one of the at least two branch path portions according to the selected route.